

## **AMENDMENTS TO THE CLAIMS:**

The following Listing of Claims will replace all prior versions and listings of the claims in the above-identified application.

### **Listing of Claims:**

**Claims 1-4 (Cancelled).**

**Claims 5 (New):** A fuel additive to improve quality of fuel, the fuel additive comprising: about 94.5% to about 99.9% by mass of oxyalkylenated monoalkyl phenol having an alkyl group, not more than 0.1% by mass of water, and not more than 5.0% by mass of oxyalkylenated monohydroxyl alcohol.

**Claim 6 (New):** The fuel additive according to Claim 5, wherein monoalkyl phenol having an alkyl group containing 6 to 16 carbon atoms is oxyalkylenated to obtain the oxyalkylenated monoalkyl phenol.

**Claim 7 (New):** The fuel additive according to Claim 6, wherein the monoalkyl phenol is selected from the group consisting of: hexyl phenol; nonyl phenol; and dodecyl phenol.

**Claim 8 (New):** The fuel additive according to Claim 5, wherein the molecular mass of the oxyalkylenated monoalkyl phenol is about 100 daltons to about 2000 daltons.

**Claim 9 (New):** The fuel additive according to Claim 5, wherein monohydroxyl alcohol of a general formula  $R_2-OH$ , where  $R_2$  is an alkyl group containing 1 to 4 carbon atoms, is oxyalkylenated to obtain the oxyalkylenated monohydroxyl alcohol.

**Claim 10 (New):** The fuel additive according to Claim 5, wherein the molecular mass of the oxyalkylenated monohydroxyl alcohol is about 100 daltons to about 910 daltons.

**Claim 11 (New):** The fuel additive according to Claim 5, wherein oxyalkylenation is achieved via one selected from the group consisting of: oxypropylenation; and oxyethylenation.

**Claim 12 (New):** The fuel additive according to Claim 9, wherein the monohydroxyl alcohol is selected from the group consisting of: methanol; and ethanol.

**Claim 13 (New):** A process for producing a fuel additive to improve quality of fuel, the process comprising:

oxyalkylenating a mixture of about 94.5% to about 99.9% by mass of monoalkyl phenol having an alkyl group, not more than 0.1% by mass of water, and not more than 5.0% by mass of monohydroxyl alcohol; and

stabilizing the oxyalkylenated mixture with an acid ion-exchange resin.

**Claim 14 (New):** The process for producing a fuel additive according to Claim 13, wherein the mixture is oxyalkylenated in presence of a base catalyst.

**Claim 15 (New):** The process for producing a fuel additive according to Claim 14, wherein the base catalyst is KOH and the hydroxyl number is below 150 mg of KOH/g.

**Claim 16 (New):** The process for producing a fuel additive according to Claim 13, wherein mixture is oxyalkylenated at a temperature about 80°C to about 170°C.

**Claim 17 (New):** The process for producing a fuel additive according to Claim 13, wherein the oxyalkylenated mixture is stabilized at a temperature below 150°C.

**Claim 18 (New):** The process for producing a fuel additive according to Claim 13, wherein the alkyl group contains 6 to 16 carbon atoms.

**Claim 19 (New):** The process for producing a fuel additive according to Claim 13, wherein the monoalkyl phenol is selected from the group consisting of: hexyl phenol; nonyl phenol; and dodecyl phenol.

**Claim 20 (New):** The process for producing a fuel additive according to Claim 13, wherein the molecular mass of oxyalkylenated monoalkyl phenol is about 100 daltons to about 2000 daltons.

**Claim 21 (New):** The process for producing a fuel additive according to Claim 13, wherein the monohydroxyl alcohol is of a general formula  $R_2-OH$ , where  $R_2$  is an alkyl group containing 1 to 4 carbon atoms.

**Claim 22 (New):** The process for producing a fuel additive according to Claim 13, wherein the molecular mass of oxyalkylenated monohydroxyl alcohol is about 100 daltons to about 910 daltons.

**Claim 23 (New):** The process for producing a fuel additive according to Claim 13, wherein alkylene oxide is used for oxyalkylenating the mixture.

**Claim 24 (New):** The process for producing a fuel additive according to Claim 23, wherein alkylene oxide is one selected from the group consisting of: propylene oxide; and ethylene dioxide.

**Claim 25 (New):** The process for producing a fuel additive according to Claim 13, wherein the monohydroxyl alcohol is selected from the group consisting of: methanol; and ethanol.

**Claim 26 (New):** The process for producing a fuel additive according to Claim 13, wherein the monohydroxyl alcohol is from about 0.1% to about 1.0% by mass.

**Claim 27 (New):** The process for producing a fuel additive according to Claim 13, wherein the acid ion-exchange resin contains functional sulfo groups and at least 0.1 mole of water per 1 mole of the functional sulfo groups.

**Claim 28 (New):** The process for producing a fuel additive according to Claim 13, wherein the acid ion-exchange resin is in a hydrogen form.

**Claim 29 (New):** The process for producing a fuel additive according to Claim 13, wherein the acid ion-exchange resin is at the temperature below 150°C.

**Claim 30 (New):** A process for producing a fuel additive to improve quality of fuel, the process comprising:

oxyalkylenating a mixture of about 94.5% to about 99.9% by mass of monoalkyl phenol having an alkyl group containing from 6 to 16 carbon atoms, not more than 0.1% by mass of water, and not more than 5.0% by mass of monohydroxyl alcohol of a general formula  $R_2-OH$ , where  $R_2$  is an alkyl group containing from 1 to 4 carbon atoms, in the presence of a base catalyst at a temperature about 80°C to about 170°C; and

stabilizing the oxyalkylenated mixture with an acid ion-exchange resin in a hydrogen form at a temperature below 150°C.

**Claim 31 (New):** A fuel additive produced by the process according to Claim 13.

**Claim 32 (New):** A fuel additive produced by the process according to Claim 30.

**Claim 33 (New):** A packet of fuel additives to improve quality of fuel, the packet comprising: about 94.5% to about 99.9% by mass of oxyalkylenated monoalkyl phenol having an alkyl group, not more than 0.1% by mass of water, and not more than 5.0% by mass of oxyalkylenated monohydroxyl alcohol.

**Claim 34 (New):** The packet of fuel additives according to Claim 33, further comprising polybuteneamine and naphtha fraction.

**Claim 35 (New):** The packet of fuel additives according to Claim 34, wherein the polybuteneamine contains chlorine below 100 mg/kg.

**Claim 36 (New):** The packet of fuel additives according to Claim 34, wherein the naphtha fraction is of the ignition temperature of 65°C.

**Claim 37 (New):** The packet of fuel additives according to Claim 33, further comprising alkenyl succinimide, Mannich base and naphtha fraction.

**Claim 38 (New):** The packet of fuel additives according to Claim 37, wherein the naphtha fraction is of the ignition temperature of 65°C.

**Claim 39 (New):** A packet of fuel additives to improve fuel quality, the packet comprising:

a fuel additive produced by a process according to Claim 13;  
polybuteneamine; and  
naphtha fraction.

**Claim 40 (New):** The packet of fuel additives according to Claim 39, wherein the polybuteneamine contains chlorine below 100 mg/kg.

**Claim 41 (New):** The packet of fuel additives according to Claim 39, wherein the naphtha fraction is of the ignition temperature of 65°C.

**Claim 42 (New):** A packet of fuel additives to improve fuel quality, the packet comprising:

a fuel additive produced by a process according to Claim 30;  
polybuteneamine; and  
naphtha fraction.

**Claim 43 (New):** The packet of fuel additives according to Claim 39, wherein the polybuteneamine contains chlorine below 100 mg/kg.

**Claim 44 (New):** The packet of fuel additives according to Claim 42, wherein the naphtha fraction is of the ignition temperature of 65°C.

**Claim 45 (New):** A process for producing a packet of fuel additives to improve quality of fuel, the process comprising:

oxyalkylenating a mixture of about 94.5% to about 99.9% by mass of monoalkyl phenol having an alkyl group, not more than 0.1% by mass of water, and not more than 5.0% by mass of monohydroxyl alcohol;

stabilizing the oxyalkylenated mixture with an acid ion-exchange resin; and

combining the stabilized oxyalkylenated mixture with polybuteneamine and naphtha fraction at about 40°C to about 50°C for 4 hours.

**Claim 46 (New):** A process for producing a packet of fuel additives to improve quality of fuel, the process comprising:

oxyalkylenating a mixture of about 94.5% to about 99.9% by mass of monoalkyl phenol having an alkyl group, not more than 0.1% by mass of water, and not more than 5.0% by mass of monohydroxyl alcohol;

stabilizing the oxyalkylenated mixture with an acid ion-exchange resin; and

combining the stabilized oxyalkylenated mixture with alkenylsuccinide, Mannich base and naphtha fraction at about 40°C to about 50°C for 4 hours.



**AMENDMENTS TO THE DRAWINGS:**

The attached sheet of drawings includes only one Figure. This sheet is provided to comply with the Examiner's request to furnish a Figure in the above-identified application, which admits to an illustration by a drawing that is absent from the application.

**Attachment:** One sheet of drawings.